Update on Scope and Direction of the Raven Management EA

In the winter of 2003-2004 a Memorandum of Understanding was executed to jointly prepare a raven management plan/environmental assessment (EA) in the California desert. Signatories to the MOU included the U. S. Fish and Wildlife Service-California/Nevada Operations Office (lead agency), Bureau of Land Management-California Desert District, Mojave National Preserve, Joshua Tree National Park, Animal & Plant Health Inspection Service-Wildlife Services, Edwards Air Force Base, U.S. Army National Training Center, Ft. Irwin, and Marine Air Ground Task Force Training Command, Twentynine Palms.

Purpose and Need for the EA

The purpose of the proposed raven management EA in the California desert is to identify and analyze a plan to reduce raven predation on hatchling and juvenile desert tortoises. The need to manage ravens was identified in the recovery plan for the Mojave population of the desert tortoise. By reducing raven predation on hatchling and juvenile desert tortoises their survivorship should increase. This increased juvenile survivorship is expected to lead to increased recruitment of desert tortoises into the reproductive population and ultimately contribute to recovery.

Proposed Action and Alternatives in the EA

<u>Proposed Action</u>: The proposed action is to develop and implement efforts to: 1) reduce the opportunities for food, water, and nest sites for ravens that are subsidized by human activities; 2) educate the public about actions they can take to reduce these subsidies; and 3) directly remove only those ravens that are known to prey on desert tortoises. These efforts would expand upon existing limited, small scale efforts at reducing trash at landfills, highway fencing, and educational outreach. Research and monitoring will provide information necessary to modify and adapt these actions to meet changing conditions and increase the likelihood that the measures are effective in reducing the level of desert tortoise mortality from raven predation.

The management of ravens will focus on the use of non-lethal methods. Methods used could include any or all of the following depending upon the circumstances: reduce or eliminate human food subsidies, reduce the availability of carcasses along roads and highways in desert tortoise habitat, reduce human subsidized water sources, remove unoccupied raven nests in and near desert tortoise management areas, and reduce human subsidized nesting substrate in desert tortoise habitat.

Lethal methods may be used to remove ravens known to prey on desert tortoises. A variety of methods would be available; however, the most appropriate method would be implemented to ensure that non-targeted individuals and species are not affected.

No Action: This alternative would maintain the status quo, and not involve additional action. This can be thought of as the current "program" alternative. It consists entirely of

limited non-lethal efforts that have been and continue to be implemented: reducing trash availability at landfills and illegal dumps, limited fencing along highways to reduce road-kills, limited educational outreach to local desert communities.

Non-lethal Methods Alternative: This alternative would allow for implementation of only non-lethal methods to prevent or deter ravens from preying on desert tortoises in desert tortoise management areas. Any or all of the non-lethal efforts listed under the proposed action could be used. The number and types of non-lethal methods would be greater and would be implemented across a larger area than in the No-Action alternative.

<u>Remove Additional Ravens:</u> This alternative would implement the proposed action plus the lethal removal of any ravens found within a desert tortoise management area whether or not they are known to have preyed upon the desert tortoise. Any or all of the lethal efforts listed under the proposed action could be used.

<u>Target Concentrations of Ravens:</u> This alternative would implement the proposed action plus using lethal methods to remove ravens at known concentration centers (e.g. landfills) whether these concentration points are in desert tortoise management areas or not and without knowing if the specific ravens had preyed upon the desert tortoise.

Impact Topics

Specific impact topics were identified based on federal laws, regulations, and Executive Orders; agency management policies; results of public scoping; and our knowledge of limited or easily impacted resources.

Impact Topics Proposed to Be Analyzed in the EA

<u>Wildlife Communities</u>: The National Environmental Policy Act (NEPA) calls for an examination of the impacts on all components of the human environment. BLM, NPS, DOD policies include protection of the natural abundance and diversity of natural communities. Since all alternatives include manipulation of wildlife resources, wildlife communities will be addressed as an impact topic in this document.

<u>Wildlife Special Status Species</u>: This section will address all federally and state listed threatened and endangered species, candidate species, species of special concern as identified by the California Department of Fish and Game, and rare species. The Endangered Species Act of 1973, as amended, requires an examination of effects to all federally listed threatened or endangered species.

<u>Human Health and Safety (Communities)</u>: The alternatives being considered include actions related to city and county management practices, e.g. waste management. Additionally, alternatives recognize that increased human occupation of the California desert is positively correlated with increases in raven population numbers. Thus, alternatives being considered also address education and outreach programs to local and visiting populations. Through the NEPA scoping process, the public identified concerns for human health and safety regarding some of the raven management actions that are

considered in this document. Therefore, human communities will be addressed as an impact topic.

Impact Topics Proposed to Be Dismissed from Further Analysis

<u>Vegetation Communities</u>: The actions proposed in the alternatives presented would either not impact the natural vegetation of the California desert or the impact would be so minor that such impacts would not be measurable in a meaningful manner. Therefore, vegetation communities are dismissed from further consideration.

Wilderness: The actions proposed in the alternatives could be implemented within designated, proposed, or potential wilderness areas. If actions are to be implemented in wilderness areas, then the land management agency for this area would prepare a Minimum Tool Analysis, as required by the Wilderness Act of 1964. Because little action is projected for wilderness areas and these actions would require additional analysis through the Minimum Tool Requirement, wilderness impacts are dismissed from further consideration.

<u>Cultural Resources</u>: People have lived in the Mojave Desert for at least 11,000 years. The historical record shows that the region of the Mojave Desert of interest to this project was inhabited and/or used by the Owens Valley Paiute, Timbisha Shoshone, Chemehuevi, Serrano, Mojave, and Cahuilla. In July 2004, tribal offices and cultural committees of these groups were contacted and asked to comment on the proposed activities. The local tribes were not concerned with the proposed activities, provided that the actions did not occur on their tribal lands. Since active raven management on tribal lands is not being considered in this document, impacts to cultural resources are dismissed from further consideration.

Other Topics: The Council of Environmental Quality established impacts topics that must be considered in all NEPA documents. These mandatory topics are: possible conflicts with the proposal and previous plans and policies; energy requirements and conservation; natural or depletable resources; urban quality; social or economically disadvantaged populations; unique ecosystems; geological resources (rocks and streambeds); stream flow characteristics; seismicity; air quality; water quality; wetlands and floodplains; prime agricultural lands; wild and scenic rivers and ecologically critical areas; and sacred sites and Indian Trust resources. Each of these topics was analyzed in relation to the potential alternatives. Each was dismissed because of lack of relevance to and/or lack of impact from the proposed project. Similarly other impact topics that were considered and dismissed because of lack of relevance and/or lack of impact include noise, traffic, recreation, socio-economic and night sky effects.